#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604

DATE: JUN 1 4 2013

SUBJECT: Unannounced Clean Air Act Inspection of Bagcraft, Chicago, Illinois

FROM: Linda H. Rosen, Environmental Engineer

Air Enforcement and Compliance Assurance Section (IL/IN)

THRU: Nathan Frank, Chief

Air Enforcement and Compliance Assurance Section (IL/IN)

TO: File

Date of Inspection May 31, 2013

Attendees Pat Leuth, Operations Manager, Bagcraft Papercon

Ed Laywell, Production Manager, Bagcraft Papercon

Linda H. Rosen, EPA Region 5, Air Inspector

## **Purpose of Inspection**

The purpose of the inspection was to assess the compliance status of Bagcraft Papercon (Bagcraft) with the Clean Air Act (CAA).

# Company Description and Background

Address: 3900 West 43<sup>rd</sup> Avenue, Chicago, Illinois

Primary Contact: Pat Leuth, Operations Manager, Bagcraft

Phone Number: 773-843-8025

# **Opening Conference Summary**

I arrived at the facility at 11:20 am. Bagcraft is located on a quiet street off of a major commercial street. I arrived at the main office which consisted of a small lobby with no receptionist. There was a phone available with a directory and I looked up the name of my available contact, Randy Van Anwerp. He was not listed in the directory so I called the general HR department. A woman named Julie Wisniewski answered the phone and I introduced myself. Ms. Wisniewski informed me that Mr. Van Anwerp left the company years ago. The person I needed to talk to was Pat Leuth and he was in a conference call until 11:45 am. As soon as she was able to reach him, she would tell him I was here.

At 11:45 a.m., Mr. Leuth, Bagcraft's Operations Manager, met me in the lobby. I showed him my credentials and explained that I was from the U.S. EPA and was here to conduct an inspection relative to the Clean Air Act. Mr. Leuth showed me to a conference room where we had our opening meeting. A few minutes into the meeting, I explained to Mr. Leuth that if any the information he presented was Confidential Business Information (CBI), to let me know. The facility did not identify any of the information it submitted during the inspection as CBI.

I first obtained some general information about the company. Mr. Leuth said that he has been at the company about 5 years. About 5 years ago, a holding company, Packaging Dynamics, purchased Bagcraft Papercon. Previous to that, about 12-15 years ago, Bagcraft Corporation had purchased Bagcraft Papercon. Packaging Dynamics owns three companies: Thilmany, which is the process of being sold, Bagcraft Papercon, and International Converter.

According to Mr. Leuth, the official name of this company is Bagcraft Papercon, LLC. The Headquarters is at this Chicago location. There are also plants in Baxter, Kansas; Ft. Madison, IA; Los Angeles, California; and Atlanta, Georgia. The facility has 214 employees at this location and operates 5 days per week, 24 hours per day. The plant has been in existence since about 1956.

There is a Corporate Environmental Health and Safety Manager in the Atlanta office who oversees the environmental issues at all 5 facilities. Mr. Leuth is in charge of the day to day business at the Chicago facility.

I asked about recent printing line additions to the facility in the last 10 years. Mr. Leuth said that lines 170, 171, and 172 were installed in 2002. Line 173 was installed three weeks ago and has been operating for one week. Line 70 was going to be installed soon and Line 181 was installed in 2006. I told Mr. Leuth that I did not have construction permits for Lines 172, 173, and 70 and he provided me copies during the records review portion of the inspection.

I asked Mr. Leuth how usage of inks and coatings is tracked at the facility. Mr. Leuth said that when an order comes in from a customer, a Bill of Materials is developed for that job. He made me a copy of an example Bill of Materials. The Bill of Materials specifies the pounds of the various inks, papers and other materials that are required for that specific job. The amount of ink that is specified is determined by the print plate size of that particular line. The "Item Setup" group sets up the Bill of Materials. The Bill of Materials specifies the line that that job will occur on. Everything is computerized. The mixing room personnel provide mixed labeled mixed ink for the specific job. The operators pick up their materials for that job. Job set up can take anywhere from one hour to several hours.

Prior to going out into the plant, I asked Mr. Leuth if he could get someone to compile the records that are required to be kept via the Title 5 permit. He said he could do that. For instance, I said that the Title 5 permit required monthly and yearly records of the HAP emissions; monthly and yearly records of the VOM emissions; usage records for certain specific lines; and the daily weighted average VOM calculation for each line (unless each ink and coating is compliant). I said that I also needed the "basis" for the VOM percentages used in the calculations (e.g., MSDS, VOM formulation data sheets). Mr. Leuth then left the conference room for about a half an hour, presumably to start getting the records ready.

When Mr. Leuth returned we had another brief conversation before going out into the plant. He said that the inks and coatings are all waterbased as of at least 15 years ago. The facility has 6-8 base colors

that the ink room personnel mix together in the with an extender to form all the various ink colors. They also uses adhesives, aka "glues." They apply a wax sometimes but Mr. Leuth says this is paraffin wax and has no VOCs. Everything is measured in pounds.

The facility has hundreds of customers. They make only bags at this location. Examples include bread bags and sub sandwich bags. There are two basic types of bags that are made: pinch bottom bags and grocery sack (stand up bags). Hostess is one of Bagcraft's biggest customers, providing about \$1 million worth of business per month. Bagcraft makes the Hostess donut bags.

#### Plant Tour

At this time, we went out into the plant. Mr. Leuth showed me one of the flexographic printing lines and how they work. Raw paper is unrolled in the unwind stand. From there, they usually print material. Then sometimes they add paraffin wax which keeps oils from leaking through the paper. Next, they form the bag and they apply glue at the seams.

During the tour, Mr. Leuth pointed out that Line 10 was moved to Atlanta in November. Lines 135, 7 and 65 were permanently scrapped. I first looked at Line 191 which is an older line. I took a picture of the press (Photo 1) and waxer (Photo 2), and then the finished bag (Photo 3). I observed newer line 172 (Photo 4) which has no waxer but does have a drier.

Next I looked at printer 173 (Photo 5) which is also relatively new and has a drier (Photo 6). The line was not operating today. Then I looked at Line 3, also relatively new, with no drier (Photo 7).

I took a photo of presses 170 and 171 together (Photo 8). Each has its own drier.

Next, while we were doing the walk through, I observed the pick up point for the inks and adhesives that are taken to the line (Photo 9). I took a photograph of one of the ink containers (Photo 10) and the extender (Photo 11). According to Mr. Leuth, the extender makes up the bulk of the ink. I also took a photograph of the return ink area where the operators return the ink (Photo 12). According to Mr. Leuth, return ink amounts are subtracted for recordkeeping purposes.

Next I looked at the ink (or mixing) room which has a computer with all the formulas (Photo 13). The computer tells them which line the various inks go to. This was done previously by the scheduling group. I took a picture of the mixing system (Photo 14).

I next looked at the return ink room (Photo 15).

Next, I observed line 22 which one of the older lines. It was laminating the bags. I took a picture of the pot that holds the glue (Photo 16). Mr. Leuth stated that the bill of materials sets how much glue goes into the pots.

I then looked at lines 20, 88, 120, 19. I took a photo of Lines 196 and 197 which were installed in 2003 (Photo 17). I walked by Lines 121, 125, 126, 130, 131, 100, and 69. Mr. Leuth showed me the place where Line 70 would be placed (Photo 18).

Next, I looked at 132 which was not operating at the time of the inspection. I walked by Lines 116, 86, 193, 146, and 191. According to Mr. Leuth, Line 138 was removed from service. Next, I walked by Lines 11, 12, 112, 194, 133, 118, 124, 134, 119 and 195.

Mr. Leuth pointed out that some lines have had the presses taken out and they only laminate preprinted bags. The preprinted bags are made on Line 181 at the facility.

Finally, I looked at press 181. This is a 10 station color press. This line makes all the preprinted bags which are used on the other lines (Photo 19).

### Record Review

At this time we returned to the office and started the records review. Mr. Ed Laywell, the Production Manager, joined us at this time. Mr. Laywell has been with the company about 7 years.

Bagcraft is subject to 35 Ill. Admin. Code Rule 218.401 (Flexographic Printing Regulations) which requires that inks and coatings used on flexographic printing lines meet the following limit either on a per coating/ink basis or as a daily weighted average as applied basis: 25 percent VOM by volume of the volatile content in the ink or coating. I asked for daily weighted average calculations and Mr. Laywell contacted the EHS manager at the Kansas facility, Mr. Damien Doerfer. Mr. Doerfer texted or emailed Mr. Laywell stating that about 194 lbs of VOM is emitted per day for all lines and the maximum on any one line is Line 181, 66.4 pounds of VOM per day. I explained to Mr. Leuth and Mr. Laywell that this was not a daily weighted average calculation and they said they understood.

Since the facility did not have daily weighted average calculations, I asked for the percent VOM by volume of the volatile content of each ink and adhesive at the plant. I also continued to reiterate that I needed the basis for the VOM percentages. After a while of searching, the facility came up with a list of inks (bases, not mixed formulas) and their percent VOM by volume of the volatile content. None appeared to have a percentage over 25 percent.

I asked for a list of the glues (adhesives) and their VOM percentages. They could not provide this at the time of the inspection but said they would send it via email by COB Monday. They also could not provide any basis for the VOM percentages but they said they would get that information by COB Monday as well. However, as of the time this report was written, the facility had not provided me any information after the inspection.

The Title 5 permit requires that the facility maintain monthly HAP emissions records and to stay a minor source of HAP. The facility provided me monthly reports of hazardous air pollutant (HAP) emissions for January through April 2013. Mr. Leuth stated that none of the adhesives contain HAP and that is why adhesives are not on the list. The facility also provided me copies of their monthly VOM usage reports for the inks and extenders for the period January-April 2013. They said they would send me the monthly VOM usage reports for the adhesives by COB Monday.

Several of the printing lines that were installed in recent years have individual line limits to avoid major source permitting. The facility had "line sheets" where they tracked the total VOM used on each line (see documents obtained, item 6).

I asked about solvent usage. Mr. Leuth said all clean up is done with soap and water. However, a small amount of solvent is occasionally added to the inks at the line. Mr. Leuth said that this is tracked through the line sheets. It is not included as a daily weighted average calculation. The solvent used is isopropyl alcohol. The mixing room personnel are in charge of tracking this material and bringing it to the line if an operator needs it. A small amount of ethyl acetate is also occasionally used by the set up team when they are mounting a plate. According to Mr. Leuth, the ethyl acetate is tracked on the line sheets. He said that the ethyl acetate was being tracked on page 2 of the line sheets. However, after the inspection, I noted that page 2 contained VOM (including solvent) usage information for specific lines, not for the entire facility.

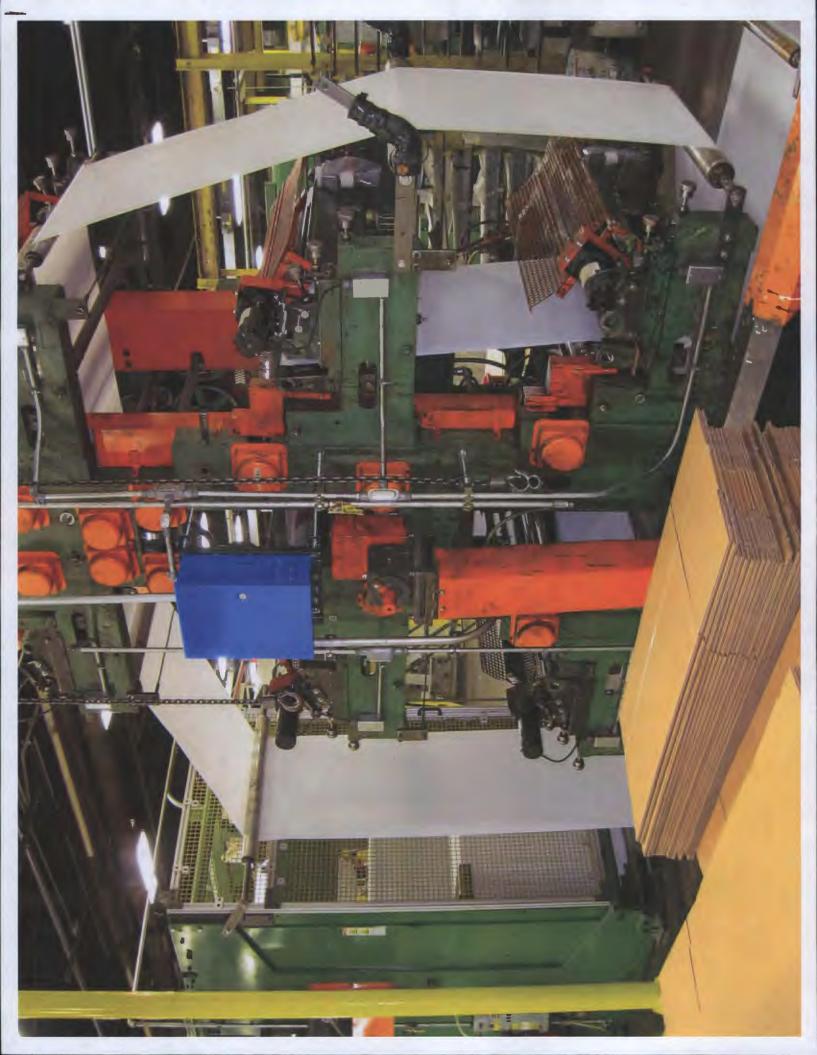
### Documents Received

The facility provided me the following documents which I took from the facility. These are in the case file.

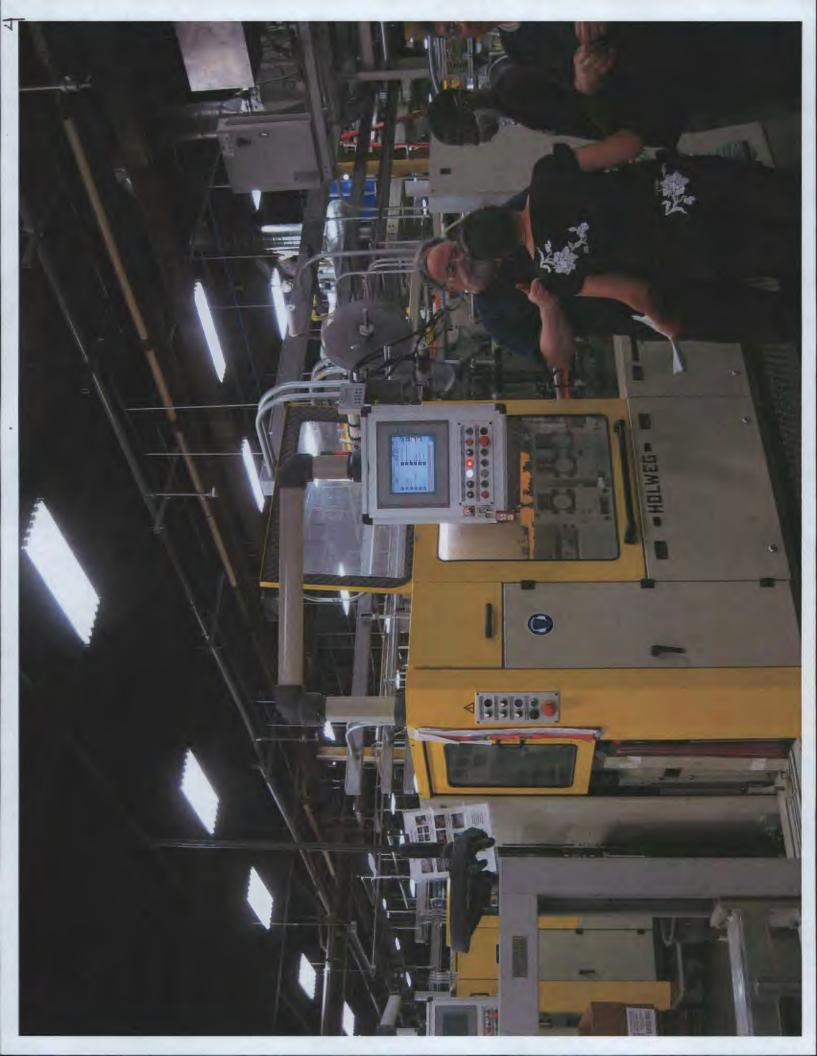
- 1-Example Bill of Materials
- 2-Construction Permits for Lines 172 and 70 and 173
- 3-List of Ink Bases and Extender with VOM percentages
- 4-Monthly HAP Emission Calculations for January-April 2013
- 5-Monthly VOC usage from Inks and extender only, January-April 2013
- 6-Monthly emission data summary, all machines, May 2012-April 2013 (line sheets)
- 7-Production report by machine, May 2013
- 8-Ink issues and returns VOC report, May 2013

## Photos (Attached)

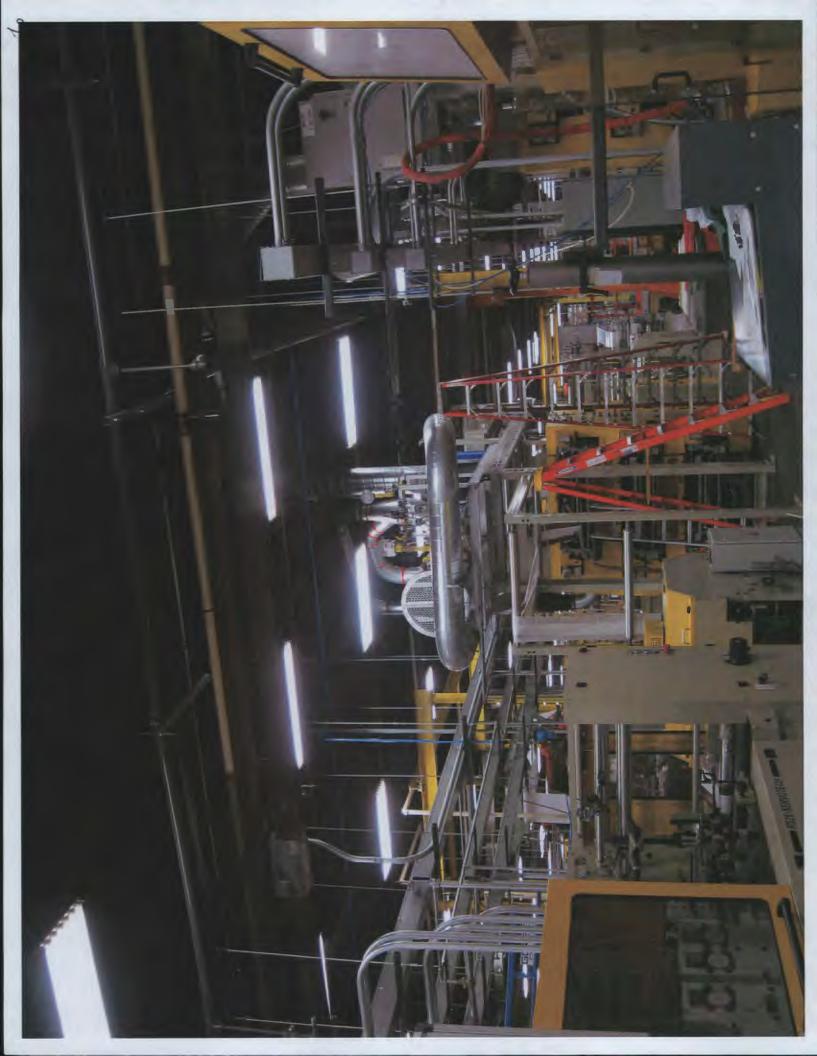
- 1 Line 191 press
- 2 Line 191 waxer
- 3 Finished bag from Line 191
- 4 Line 172
- 5 Line 173
- 6 Line 173 drier
- 7 Line 3
- 8 Lines 170 and 171
- 9 Pick up point for inks and adhesives
- 10 Ink container
- 11 Extender
- 12 Return ink area
- 13 Mixing room
- Mixing system
- 15 Return ink room
- 16 Line 22 glue pot
- 17 Lines 196 and 197
- 18 Space for Line 70
- 19 Line 181



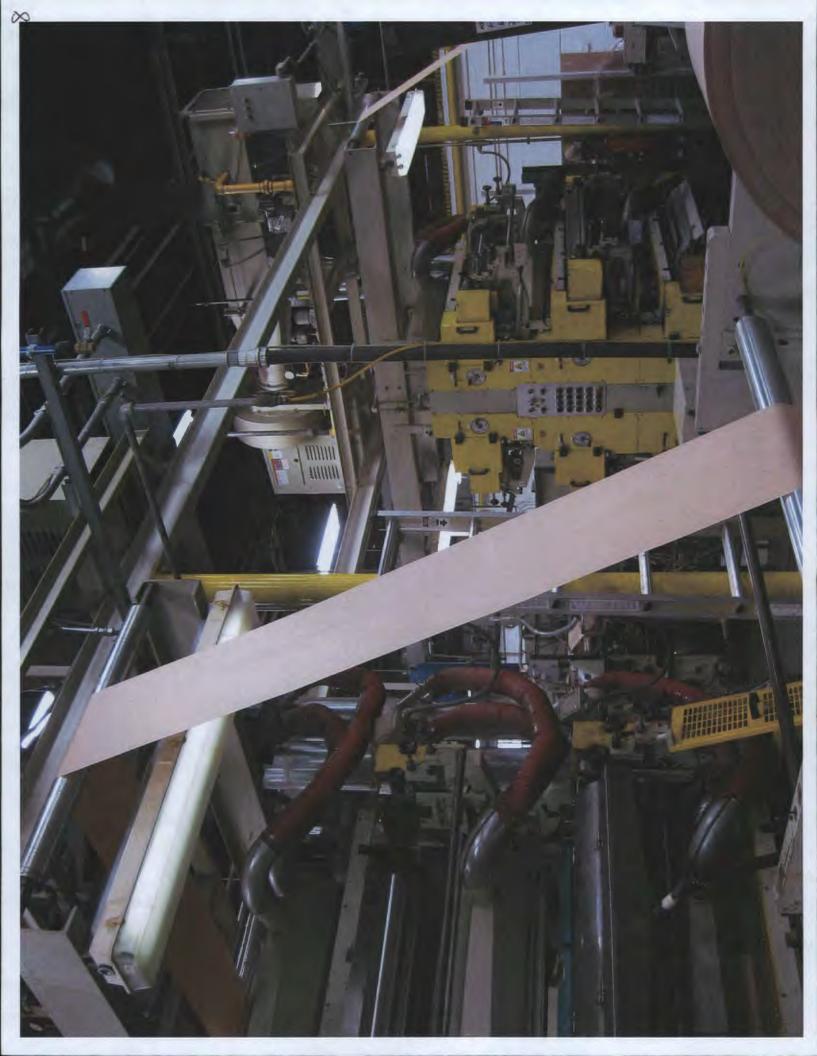




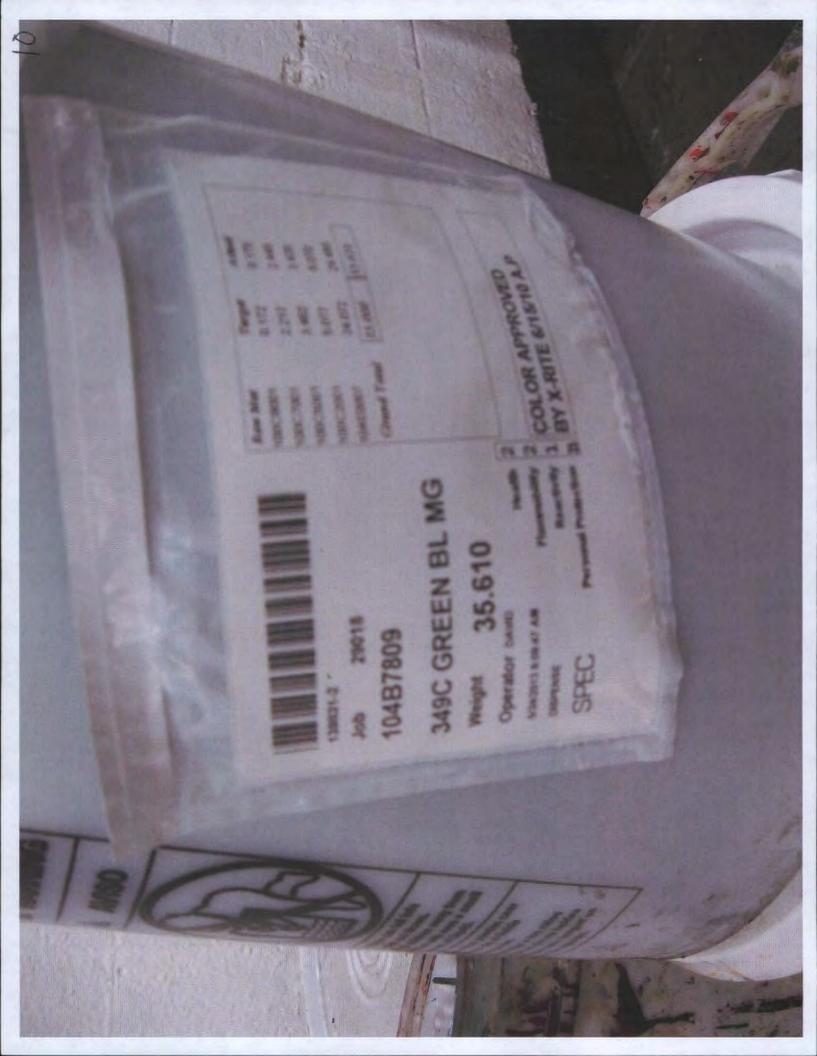
















a







